IN THE CLAIMS:

1. (Currently Amended) A method for forming semiconductor film single-crystal domains, the method comprising:

forming a substrate;

forming a single-crystal seed overlying the substrate, selected from the group including a nanowire and a self assembled monolayer (SAM);

forming an amorphous film overlying the seed;

annealing the amorphous film; and,

forming a single-crystal domain in the film responsive to the single-crystal seed.

2. (Original) The method of claim 1 wherein forming an amorphous film overlying the seed includes forming a film from a material selected from the group including silicon and silicon-germanium.

3. (Original) The method of claim 2 wherein annealing the amorphous film includes annealing with a process selected from the group including laser annealing, laser induced lateral growth (LiLAC), and furnace annealing.

4. (Original) The method of claim 3 wherein forming a substrate includes forming a substrate from a material selected from the group including glass, plastic, metal, and silicon.

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5. (Original) The method of claim 4 further comprising prior to forming the single-crystal seed, forming an insulator film overlying the substrate.

6. (Original) The method of claim 5 wherein forming an insulator film overlying the substrate includes forming the insulator layer from a material selected from the group including SiO2, SiNx, and combinations of SiO2 and SiNx.

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8. (Currently Amended) The method of claim [[7]] 1 wherein forming a single-crystal seed includes forming a single-crystal seed having a crystallographic orientation selected from the group including <110> and <100>.

9. (Original) The method of claim 6 wherein forming a single-crystal seed includes forming a nanowire having a diameter in the range of 2 to 50 nanometers and a length in the range of 10 to 1000 microns.

10. (Currently Amended) The method of claim [[7]] 1 wherein forming a single-crystal seed includes forming a plurality of seeds overlying the substrate; and,

wherein forming a single-crystal domain in the film responsive to the seed includes forming a plurality of single-crystal domains, each domain responsive to a corresponding seed.

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11. (Original) The method of claim 6 wherein annealing the amorphous film includes annealing using the LiLAC process with a beamlet width less than 20 microns.

12. (Original) The method of claim 11 wherein annealing the amorphous film includes annealing using the LiLAC process with a beamlet width less than 10 microns.

13. (Currently Amended) The method of claim [[7]] 1 wherein forming a single-crystal seed includes forming a nanowire with a first length; and,

wherein annealing the amorphous film includes annealing using the LiLAC process with a beamlet length greater than the first length.

14. (Currently Amended) The method of claim [[7]] 1 wherein forming a single-crystal seed includes forming a plurality of single-crystal seeds; and,

wherein annealing the amorphous film includes annealing using the LiLAC process with a beamlet length sufficient to simultaneously irradiate a plurality of seeds.

15. (Currently Amended) The method of claim [[7]] 1 wherein annealing the amorphous film using the LiLAC process includes step-and-repeat annealing in a first direction; and,

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wherein forming a single-crystal domain in the film includes forming a single-crystal domain laterally grown in the first direction, having a length of greater than 50 microns.

16. (Original) The method of claim 15 wherein forming a single-crystal domain in the film includes forming a single-crystal domain laterally grown in the first direction, having a length of greater than 100 microns.

17. (Currently Amended) The method of claim [[7]] 1 wherein forming a single-crystal seed overlying the substrate includes depositing the single-crystal seed overlying a selected area of the substrate.

18. (Original) The method of claim 17 wherein depositing the single-crystal seed overlying a selected area of the substrate includes:

depositing a plurality of seeds overlying the substrate;

forming a mask over the selected area of the substrate; and,

etching the seeds from the unmasked areas.

19. (Currently Amended) The method of claim [[7]] 1 wherein forming a single-crystal seed includes depositing a plurality of single-crystal seeds overlying the substrate, including a first seed, overlying a first area of the substrate; and,

wherein forming a single-crystal domain includes:

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forming the single-crystal domain in response to annealing the first seed; and,

recrystallizing the plurality of seeds in the crystallographic orientation of the first seed.

20. (Original) The method of claim 17 wherein forming a single-crystal seed overlying the substrate includes depositing a nanowire having a length in a first direction with respect to the underlying substrate.

21. (Original) The method of claim 10 wherein forming an amorphous film overlying the seed includes forming an amorphous Si film; and,

the method further comprising:

forming a plurality of pixel areas, each pixel area corresponding to the plurality of single-crystal domains.

22. (Currently Amended) The method of claim [[7]] 1 wherein forming an amorphous film overlying the seed includes forming an amorphous Si film; and,

the method further comprising:

forming a liquid crystal display (LCD) pixel area in the single-crystal domain.

23. (Currently Amended) The method of claim [[7]] 1 wherein forming an amorphous film overlying the seed includes forming an amorphous Si film; and,

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the method further comprising:

forming thin-film transistors (TFTs) in the single-crystal domain.

24. (Original) The method of claim 23 wherein forming a single-crystal seed includes forming a seed with a <100> crystallographic orientation; and,

wherein forming TFTs in the single-crystal domain includes forming an n-type TFT.

25. (Original) The method of claim 23 wherein forming a single-crystal seed includes forming a seed with a <110> crystallographic orientation; and,

wherein forming TFTs in the single-crystal domain includes forming a p-type TFT.

26-50. Canceled

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